



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,088	09/30/2003	Jung-Seon Park	CU-3336 VE	4762
26530 7590 02/16/2007 LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE SUITE 1600 CHICAGO, IL 60604			EXAMINER KARLS, SHAY LYNN	
			ART UNIT	PAPER NUMBER
			1744	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/16/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/675,088

Applicant(s)

PARK ET AL.

Examiner

Shay L. Karls

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-13,15,16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-13,15,16 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2-7, 10-13, 15-16, 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Best et al. (PGPub 20040216263).

Best teaches a nozzle assembly (14) for drawing in air having dust and dirt. There is a main body (16) including a body frame (46), a dust collector (50) connected to the body frame and a drive motor (68). There is a frame assembly (12) including a frame body (20) and a connecting portion (24) formed with a lower part of the frame body. The frame assembly and the nozzle are pivotally connected (paragraph 0007).

With regards to claim 2, frame body further comprises a front casing facing forward with respect to the vacuum cleaner and a rear casing coupled to the front casing (figure 1 shows that the frame body (2) is divided into two parts by the vertical line drawn symmetrically through the frame body. The frame body being shaped to correspond to an outer circumference of the main body (figure 1 and 2).

With regards to claim 3, the frame assembly further comprises a support (top surface of 24) for supporting the main body.

With regards to claim 4, the frame assembly further comprises a connecting guide for removable connecting accessories to the vacuum cleaner (22; figure 2).

With regards to claim 5, the frame body further comprises a wheel (32) connected to the lower part of the frame assembly.

With regards to claim 6, the main body of the vacuum is connected to the dust collector (figure 1) and further comprises a dust receptacle (50) removable connected to the body frame for collecting dust and dirt. There is a button formed at an upper part of the body frame (on/off switch; paragraph 0024).

With regards to claim 7, the frame assembly further comprises a frame handle (18) disposed at an upper part thereof, and there is a handle groove (62) disposed at a position corresponding to the button of the main body of the vacuum cleaner.

With regards to claim 10, the connecting portion comprises a communication hole (not labeled, see figure 6, what 94 connects to) through which the air drawn in through the nozzle assembly is directed to the main body of the vacuum and a communicating member (94) connected to the communicating hole is formed at the main body of the vacuum (see figure below)

With regards to claim 11, there is a power port on one side of the connecting portion for providing power from the main body and a power connector disposed on the lower part of the main body to be connected to the power port (not labeled but shown on figure 6 to the left of the communication hole) (see figure below).

Art Unit: 1744

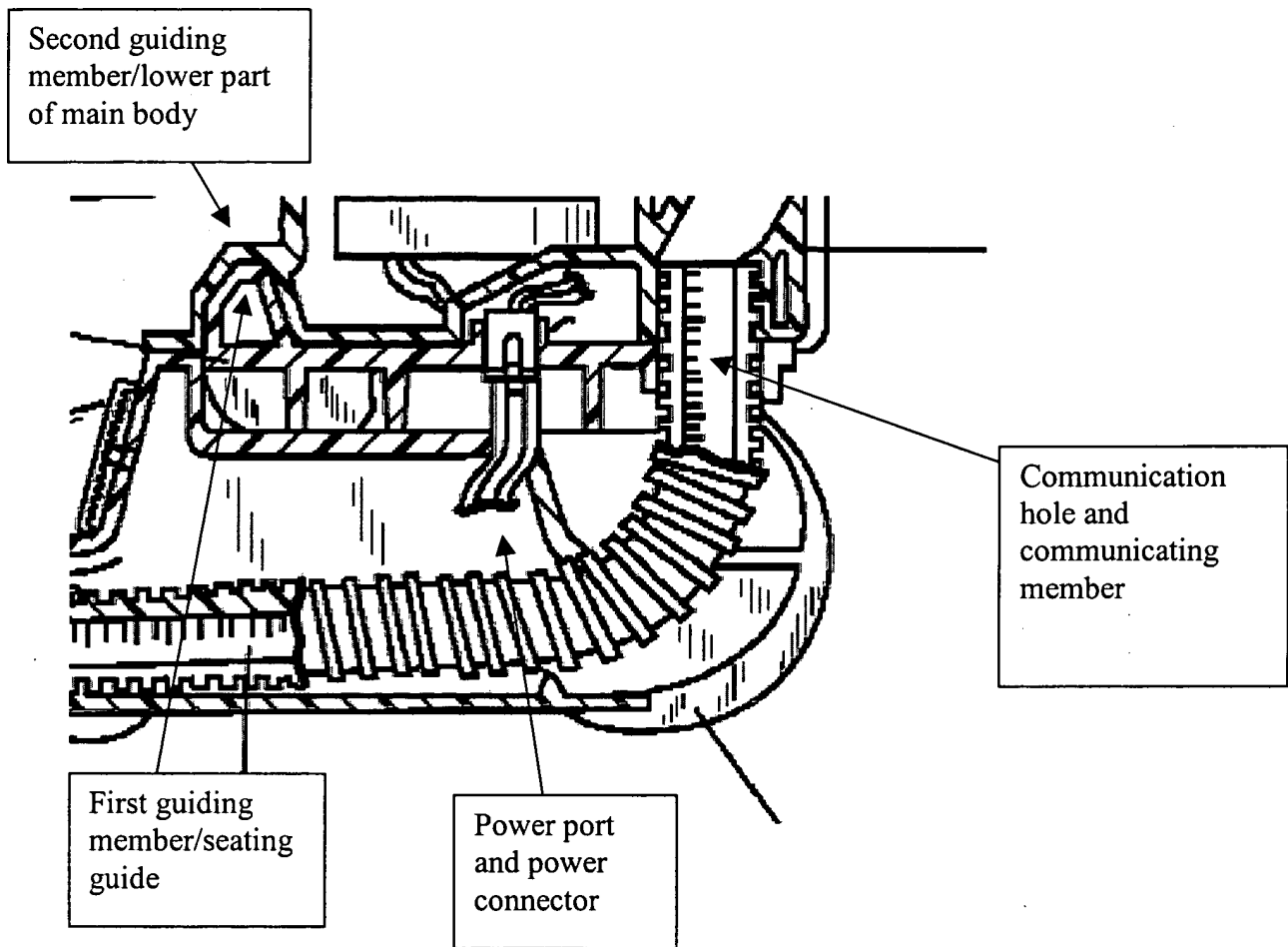
With regards to claim 12, there is a first guiding member on the connecting portion and a second guiding member corresponding to the first guiding member on the lower part of the main body (see figure below).

With regards to claim 13, the first guiding member is shaped in to a convex protrusion (cross section shows a convex shape in figure below) and the second guiding member is shaped in to a concave groove (cross section shows a concave groove in figure below).

With regards to claim 15, there is a seating guide on the connecting portion corresponding to the lower part of the main body of the vacuum cleaner (see figure below).

With regards to claim 16, the seating guide is shaped as a convex protrusion (cross section shows a convex shape in figure below) and the lower part of the main body is shaped as a concave groove (cross section shows a concave groove in figure below).

With regards to claim 19, there is an on/off switch (paragraph 0024) disposed at a front part of the main body.



Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

In those cases where the applicant files the foreign papers for the purpose of overcoming the effective date of a reference, **a translation is required if the foreign papers are not in the English language.** When the examiner requires the filing of the papers, the translation should also be required at the same time. **This translation must be filed together with a statement that the translation of the certified copy is accurate.**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Best ('263) as applied to claim 1 above in view of Ohta et al. (USPN 6859975).

Best teaches all the essential elements of the claimed invention however fail to teach that the button is integrally formed with a connecting projection so that the connecting projection moves together with the button (claim 8). Also that there is a connecting recess that is slanted (claim 9) disposed in the frame body of the frame assembly shaped and dimensioned to correspond to the connecting projection (claim 8). Best teaches a handle groove (68, 62 respectively) disposed at a top portion of the main body of the vacuum cleaner. Ohta teaches a vacuum cleaner with a removable canister cover. The cover comprises a button (48) located at the top portion of the cover that is integrally formed with a connecting projection (vertical extension of 48b that engages 1a, see figures 3-4 and col. 7, lines 1-4) that moved together with

Art Unit: 1744

the movement of the button. There is a connecting recess (1a, col. 7, lines 1-4) disposed in the frame body of the frame assembly shaped and dimensioned to correspond to the connecting projection. The connecting recess is slanted (1a, figure 3 shows a portion of 1a that is slanted at a downward angle). Ohta's handle (47a) comprises a handle recess that corresponds to the button operation of the main body. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Best's main body to include a quick release button corresponding to the handle groove as taught by Ohta so that the main body can be released from the frame assembly with a one handed operation for quick use when cleaning tight spaces that are not feasible for the nozzle.

Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Best ('263) in view of Weaver ('321).

Best teaches all the essential elements of the claimed invention including that the shaft member is pivotally connected to the nozzle (paragraph 0023) however Best fails to teach that the connecting portion including a shaft member extended downwardly therefrom for pivotably connecting the shaft member with the nozzle (claim 18). Best also fails to teach a first fixing portion at the upper part of the nozzle and a second fixing portion at the lower part of the frame assembly, corresponding to the first fixing portion, to provide a connection between the connecting portion and the frame assembly (claim 20), wherein the first fixing portion is shaped and dimensions as a concave groove and the second fixing portion is shaped and dimensioned as a convex protrusion (claim 21).

Weaver teaches a vacuum having a connecting portion which include a shaft member (230, 232) extending downward for pivotally connecting the shaft member with the nozzle. The

Art Unit: 1744

shaft is received in recesses (264, 266) for pivoting. Weaver vacuum also comprises a first fixing portion (250) formed at the upper part of the nozzle (16) and a second fixing portion (lower surface of 200) formed at the lower part of the frame assembly (18). The first fixing portion corresponds to the second fixing portion to provide a connection between the connecting portion and the frame assembly.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Best's pivoting means with shaft members extending downward as it considered well known and further exemplified by Weaver as a means for pivoting the shaft member with the nozzle assembly.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Best's nozzle assembly with a first fixing portion and modify the frame assembly with a second fixing portion as it is well known and further exemplified by Weaver as a means to provide a connection between the connecting portion and the frame assembly.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Best ('263) in view of Weaver ('321).

Best in view of Weaver fail to teach that the fixing portion is shaped as a concave groove or a convex protrusion and that the second fixing portion is shaped as a corresponding concave groove or convex protrusion. The fixing portions of Best in view of Weaver are not convex or concave but are rectangular. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use convex or concave fixing portions because Applicant has not disclosed that convex or concave fixing portions provide an advantage, is used for a

Art Unit: 1744

particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the shape as taught by Best in view of Weaver or the claimed convex/concave shape because both shapes perform the same function of providing a connection between the connecting portion and the frame assembly equally well. Therefore, it would have been obvious to one of ordinary skill in the art to modify Best in view of Weaver to obtain the invention as specified in claim 21.

Response to Arguments

The rejections with regard to Weaver as the primary reference have been withdrawn since the applicant amended claim 1 to include the limitations of claim 2.

Regarding the Best reference, the applicant is required to file a certified translation of the foreign reference in order to overcome the 102(e) rejection. This translation must be filed together with a statement that the translation of the certified copy is accurate. Therefore, the rejection is maintained.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37


Art Unit: 1744

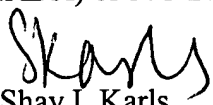
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Karls whose telephone number is 571-272-1268. The examiner can normally be reached on 7:00-4:30 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


GLADYS J.P. CORCORAN
SUPERVISORY PATENT EXAMINER


Shay L. Karls
Patent Examiner
Art Unit 1744